

Amendments to the Claims

Please amend claims 2 and 7-12, and cancel claims 1, 6 and 13-19. The following listing of claims will replace all prior versions and listings of claims in the application.

1. (Cancelled) ~~A method of providing a user access to a network for a computer configured for a different network, the method being implemented by a server to allow the computer to access the network via a foreign network without user initiated software or hardware configuration changes, the method comprising the steps of:~~
~~—— automatically determining and assigning an Internet Protocol (IP) address for the computer connected on the foreign network;~~
~~—— registering the computer in association with addressing information including the assigned IP address and a Media Access Control (MAC) address of the computer;~~
~~—— storing and maintaining the addressing information for registered computers;~~
~~and~~
~~—— filtering packets to permit only the registered computers to access the network;~~
~~and~~
~~—— translating an IP address in a packet based on the MAC address, and transparently directing traffic to and from the computer from and to the network based on the addressing information.~~

2. (Currently Amended) The method of claim ~~4-10~~ wherein the step of automatically determining and assigning comprises the step of examining whether an incoming packet from the computer is an IP or ARP packet, and the step of determining the assigned IP address based on the IP or ARP packet.

3. (Original) The method of claim 2 wherein the step of automatically assigning comprises the step of assigning an IP address to the computer from a pool of IP addresses for the foreign network.

4. (Original) The method of claim 3 wherein the step of registering comprises the step of fixing a registration period during which the computer is permitted access to the foreign network.

5. (Previously Amended) The method of claim 4 wherein the step of maintaining comprises the step of unregistering the computer when the registration period has expired.

6. (Cancelled) ~~The method of claim 1 wherein the step of registering comprises the step of collecting and maintaining billing and registration status information.~~

7. (Currently Amended) The method of claim 6-10 wherein the step of maintaining billing information comprises the step of storing the collected information in a database.

8. (Currently Amended) The method of claim 6-10 wherein the steps of maintaining the addressing, billing and registration status information comprises the step of periodically backing up the said information.

9. (Currently Amended) The method of claim 6-10 wherein the steps of maintaining the addressing, billing and registration status information comprises the step of reloading the most current backup information in the event of a computer failure.

10. (Currently Amended) ~~The method of claim 6~~ A method of providing a user access to a network for a computer configured for a different network, the method being implemented by a server to allow the computer to access the network via a foreign network without user initiated software or hardware configuration changes, the method comprising the steps of:
automatically determining and assigning an Internet Protocol (IP) address for the computer connected on the foreign network;

registering the computer in association with addressing information including the assigned IP address and a Media Access Control (MAC) address of the computer;

storing and maintaining the addressing information for registered computers;
and

filtering packets to permit only the registered computers to access the network;
and

translating an IP address in a packet based on the MAC address, and transparently directing traffic to and from the computer from and to the network based on the addressing information; and

wherein the step of registering comprises the step of collecting and maintaining billing and registration status information, wherein the step of collecting and maintaining comprises the step of identifying the computer for billing purposes by using Simple Network Management Protocol (SNMP) and a network switching architecture to identify a switch port to which the computer is connected.

11. (Currently Amended) The method of claim ~~6-10~~ wherein the step of collecting and maintaining comprises the step of identifying the computer for billing purposes through use of a preissued access code.

12. (Currently Amended) A computer readable medium containing the computer instructions which when executed on a computer carries out the steps of claim ~~4-10~~.

13. (Cancelled) ~~A server for use with a network to provide access to a computer configured for a different network without reconfiguring the computer through hardware or software comprising:~~

- ~~1) a registration module to register the computer to access the network;~~
- ~~2) a registration driver to sign IP addresses and maintain and access addressing information including IP addresses and MAC addresses;~~
- ~~3) an internal interface to connect the server to the computer;~~
- ~~4) an external interface to connect the server to the network;~~
- ~~5) a packet driver module to perform NAT at the internal interface;~~

- ~~6) a packet filter that permits transmission of packets to and from the external interface based on registration status;~~
- ~~7) a DHCP module to service DHCP request based on assigned IP address; and~~
- ~~8) an ARP module that uses the registration driver to provide MAC address for an assigned IP address.~~

~~14. (Cancelled) The server of claim 13 wherein the registration module further comprises a web based user interface.~~

~~15. (Cancelled) The server of claim 14 wherein the web based user interface identifies the computer for billing purposes by using SNMP and the network switching architecture to identify the switch port to which the computer is connected.~~

~~16. (Cancelled) The server of claim 14 wherein the web based user interface identifies the computer for billing purposes through use of a preissued access code.~~

~~17. (Cancelled) The server of claim 13 wherein the registration driver maintains and accesses the addressing information including the original IP address, the assigned IP address, and the MAC address of the computer, and the registration status information.~~

~~18. (Cancelled) The server of claim 13 wherein the packet driver module only PERFORMS NAT if the original IP address does not equal the assigned IP address.~~

~~19. (Cancelled) The server of claim 13 wherein the packet filter further provides NAPT as required.~~